CLAIMS

1. A ceramic filter comprising:

honeycomb segments bonded together, being partitioned by porous walls, and having vents for exhaust gas to flow therethrough from an inlet to an outlet in a longitudinal direction,

wherein each of the honeycomb segments includes first vents and second vents alternately placed,

wherein the first vents are filled at the inlet and are open at the outlet,

wherein the second vents are open at the inlet and are filled at the outlet,

wherein each of the honeycomb segments has at the inlet an end surface having a central portion and a peripheral portion enclosing the central portion,

wherein the second vents in the central portion are additionally filled at the inlet,

wherein the central portion is larger in vent-filling percentage than the peripheral portion at the inlet.

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2. The ceramic filter according to claim 1,

wherein the central portion has an additional filling percentage set on the condition that increase percentage of pressure loss of the entire filter, increasing with an amount of additional filling, is a predetermined value or less and that decrease percentage of the maximum temperature during burning of soot accumulated in the filter is a predetermined value or more.

3. The ceramic filter according to claim 1,

wherein the central portion has an additional filling percentage set within a range of 0.1 to 10 % to a total area of an end surface of each honeycomb segment at the inlet.

4. The ceramic filter according to claim 2,

wherein the central portion has an additional filling percentage set within a range of 0.1 to 10 % to a total area of an end surface of each honeycomb segment at the inlet.

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